

To: Shore, Berry[Shore.Berry@epa.gov]
From: Enck, Judith
Sent: Wed 6/22/2016 1:53:06 PM
Subject: Re: POFA/POFS: Coverage of June 20 Newburgh Public Meeting

Great. Tx

Sent from my iPhone

On Jun 22, 2016, at 9:52 AM, Shore, Berry <Shore.Berry@epa.gov> wrote:

Yep, talked to Elias about missing coverage, he will do a compilation edition tomorrow.

From: Enck, Judith
Sent: Wednesday, June 22, 2016 8:58 AM
To: Shore, Berry <Shore.Berry@epa.gov>
Subject: Re: POFA/POFS: Coverage of June 20 Newburgh Public Meeting

Tx Berry. I think we are missing clips from over the wknd and Monday and tuesday It
could be great if they were compiled and circulated Tomorrow or Friday Tx

Sent from my iPhone

On Jun 22, 2016, at 8:25 AM, Shore, Berry <Shore.Berry@epa.gov> wrote:

Officials Detail Actions On PFOS Contamination In Newburgh

By Allison Dunne • 13 hours ago

WAMC, Northeast Public Radio

During an informational forum Monday in Newburgh about PFOS contamination found in the city's drinking water supply, federal, state and local officials updated the public on actions being taken. WAMC's Hudson Valley Bureau Chief Allison Dunne has more.

The public learned of the PFOS contamination in early May after testing in Silver Stream and Washington Lake, the main source of drinking water for Newburgh. The city quickly switched to a different water source, Brown's Pond,

which it has since depleted. Governor Andrew Cuomo's Water Quality Rapid Response Team and the New York State Departments of Environmental Conservation and Health have been working with city and county officials and have committed to fund the city's hookup to the Catskill Aqueduct for the water supply amid the design and construction of a filtration system, which it also will fund. Newburgh Mayor Judy Kennedy is breathing a sigh of relief.

"I'm so glad that the state is stepping up and helping us," says Kennedy. "If it weren't, I don't know what we would be doing because there's just no way that the city could take that cost on. We just couldn't do it because our citizens can't take any more taxes."

The state also plans to upgrade pipes, valves and other components of the City's existing connections to Brown's Pond and the Catskill Aqueduct to ensure that Newburgh can more efficiently draw from these backup sources. Martin Brand is DEC Region 3 director. He says the investigation continues into the source of contamination.

"The source of the PFOS contamination in the City of Newburgh water supply has not been fully determined," says Brand. "However, we've been sampling since March. We've taken samples from surface water and sediment and stormwater drainage systems in the watershed and the tributaries to Lake Washington and we have enough data to indicate that certainly the Air National Guard Base and perhaps the commercial side of the airport, Stewart International Airport, are contributing some of the contamination to that watershed and that drinking water supply system."

DEC has scheduled additional sampling for the coming weeks. The agency is also investigating the use and storage of firefighting foam containing PFOS in the areas around Washington Lake and its tributaries to identify potential sources. Environmental Protection Agency Regional Administrator Judith Enck commends city officials for having acted quickly. She underscores three aspects of the contamination issue.

"The residents of Newburgh deserve clean and healthy water every single day. We have that today; we want to make sure that continues," says Enck.

“Second, we all have to work together to find the source of the pollution and cut that off. Just switching water supplies is not a sustainable solution. We want to find out where is this chemical coming from, how do we stop it, and how do we make sure the polluters pay the full cost of cleanup. And then, third, EPA is always concerned about the Hudson River, and we want to make sure that this contamination is not diverted from a going to a particular water source and then heading toward the Hudson.”

And Enck talks about potential ill-health effects.

This is indeed a serious issue,” Enck says. “Studies show that exposure to PFOS can result in damage to the thyroid, damage to the liver, decreased fertility in women and low birth weight babies along with different developmental affects.”

PFOS was first detected and reported to the EPA in 2014 when samples ranged between 140 and 170 parts per trillion. These samples were below the EPA’s then-provisional short-term health advisory of 200 parts per trillion. When sampling in March confirmed the presence of PFOS, it was about 140 parts per trillion. That was before the EPA issued a new, long-term health advisory in May of 70 parts per trillion as the threshold.

Dan Shapley is water quality program manager for Riverkeeper, which has called on state officials to take certain actions. One concerns Recreation Pond, at Stewart Air National Guard Base, where samples taken in March showed very high levels of PFOS.

“So there’s a pond that is the major source identified so far. There’s a source behind that source that the DEC is attacking and controlling, and that’s critically important,” says Shapley. “In the meantime, we believe that there should be a remedial, interim remedial measure taken on that pond stop that pond from discharging into the stream that goes into the drinking water reservoir.”

In a letter responding to Riverkeeper, DEC and DOH commissioners wrote,

“simply prohibiting said discharge without a thorough investigation of impacts is not feasible and potentially impacts other areas, including drinking water sources.” Nevertheless, DEC officials stress that their investigation to identify and eliminate contamination sources includes addressing discharges from Recreation Pond.

Audio clip at: <http://wamc.org/post/officials-detail-actions-pfos-contamination-newburgh#stream/0>

Newburgh PFOS Forum Draws Calls For Blood Testing

By Allison Dunne • 19 hours ago

June 21, 2016

WAMC Northeast Public Radio

Federal, state and local officials briefed dozens of area residents on developments concerning PFOS contamination in the City of Newburgh’s drinking water supply. The update came at a forum at Mount Saint Mary College Monday evening during which several residents called for blood testing.

The public learned of the PFOS contamination in early May after testing in Silver Stream and Washington Lake, the main source of drinking water for Newburgh. The city quickly switched to a different water source, Brown’s Pond, which it has since depleted. The city now draws water from the Catskill Aqueduct. Governor Andrew Cuomo’s Water Quality Rapid Response Team and the New York State Departments of Environmental Conservation and Health have been working with city and county officials and have committed to fund the city’s hookup to the Catskill Aqueduct as well as fund the design and construction of a filtration system. The U.S. Environmental Protection Agency has been lending its expertise. Perflourinated chemicals have been linked to ill-health effects including various forms of cancer. City of Newburgh resident Chad Wade is focused on pushing for answers about providing blood sampling for PFOS levels.

“Well, I’m concerned with getting my son tested, two sons. I have a 1 year old and a 3 ½ year old who both... my wife drank City of Newburgh water with PFOS while she was pregnant,” says Wade.

He adds:

“I’ve heard a lot from the folks that we need to talk to our doctors,” Wade says. “I’ve done that but they don’t have the answers because our state folks don’t have the answers.”

“Would you like to see the state Department of Health say we’re going to test like they did in Hoosick Falls?” Dunne asks.

“I think they should have been here testing already,” says Wade.

Recently, the state Health Department began returning blood testing results for Hoosick Falls residents affected by PFOA contamination in the drinking water. PFOA is a sister chemical to PFOS. Hoosick Falls resident Michele Baker attended the Newburgh forum.

“I wanted to come down to see how New York state, the EPA, was addressing issue outside my community,” says Baker. “Hoosick Falls is ground zero for PFOA contamination and it’s been handled horribly by the Cuomo Administration.”

Cuomo announced in January what he called immediate and aggressive actions to protect the health of Hoosick Falls residents. Baker, who is part of a class-action lawsuit, says she has received blood test results for herself and her daughter. And though she declined to reveal the results, she called her daughter’s PFOA blood level unacceptable. Baker wants the state to hold hearings on the contamination issue and approached Democratic Assemblyman Frank Skartados, whose district includes Newburgh.

“Just curious, where do you stand on Governor Cuomo holding hearings for Hoosick Falls,” asks Baker.

“Well, obviously that’s a decision that he has to make. I don’t represent that community, but if there’s enough…” says Skartados.

“But now that we’re in this together,” says Baker.

“Absolutely. I think it may be a good idea for him to do that,” says Skartados.

And asked whether he would push for blood testing for Newburgh residents, Skartados replies:

“I think that would be a good idea. Absolutely. I will do my part. It’s a serious problem,” says Skartados. “But I’m also grateful that we are responding as quickly as we are in such a short period of time. I think we’ve done a great deal. But I will continue to fight for the residents of the City of Newburgh and anywhere else that there may be contaminants or water problems.”

Dan Shapley sat on the panel. He is water quality program manager for Riverkeeper.

“Tonight, I think one of the things that really came through was a suggestion that we had made for blood testing, really rang true,” Shapley says. “A lot of residents really stood up and said, I don’t have the information I want about my own exposure. I don’t think my doctors have the information to guide me.”

Earlier in the panel discussion, DOH Director of the Center for Environmental

Health Dr. Nathan Graber said blood testing for PFOS is still under consideration. Graber speaks to what drives this decision.

“I think a big part of it is the interest in the community and then talking to our partners about how to actually carry that out, be it our federal partners, local partners and other state partners,” says Graber.

He says he will relay to his colleagues residents’ calls for blood testing.

“I think we heard a substantial call for blood testing here tonight and I’m sure we’ll hear more,” Graber says.

Newburgh City Councilman Torrance Harvey says he’s been fielding calls from residents who want to know about blood testing.

“Everyone’s working hard at identifying what it is, trying to find the source of where it’s coming from and get the people responsible to pay and remediate this issue,” says Harvey. “But no one has mentioned when are we going to get the people tested for free. When, where and how.”

He continues:

“And the gentleman from the state said, we’ll get back to you. That’s unacceptable,” Harvey says.

DEC officials also informed audience members about potential sources of contamination, noting the investigation continues, including sampling of Stewart Airport and the Stewart Air National Guard base stormwater outfalls.

State to Fund Interim Water Supplies for Newburgh: Officials are still trying to figure out how Lake Washington became contaminated.

By Lanning Taliaferro (Patch Staff)

June 21, 2016 12:17 pm ET

Patch

Newburgh residents are getting water from the Catskill Aqueduct instead of Lake Washington while city, county and state officials respond to the presence of contaminants there.

State officials announced a series of ongoing actions on Tuesday to assist Newburgh after testing confirmed the presence of perfluorooctanesulfonic acid (PFOS) in the city's public water supply.

The contamination was first detected and reported to the Environmental Protection Agency in 2014 as part of an EPA unregulated contaminant monitoring program.

While steps are in place to provide uncontaminated water, the investigation into the source or sources of the problem continues. For example, the New York State Department of Environmental Conservation is investigating historic usage and storage of PFOS-containing firefighting foam in the areas around Lake Washington and its tributaries.

State officials said that as part of the ongoing actions of Gov. Andrew Cuomo's Water Quality Rapid Response Team, the DEC and the state Department of Health have been working with city and Orange County officials since March to address the impacts of the contamination and launch a comprehensive investigation into the source of the pollution.

The State's recent actions include the following commitment:

- The State will fully fund the design and construction of a permanent Granulated Activated Carbon (GAC) system to filter PFOS out of the City of Newburgh's public water supply that will be operational by October 2017;
- The State will provide funding for the City to obtain clean water from the Catskill Aqueduct while the new filtration system is designed and constructed; and
- The State is expanding its ongoing investigation into sources of contamination impacting Lake Washington, the City's primary water supply source, to identify the potential causes of pollution that will drive remediation efforts.

"Through Governor Cuomo's leadership in creating the state's Water Quality Rapid Response Team, DEC has worked quickly to assist the City of Newburgh in addressing this water contamination and ensure residents have access to clean water," said DEC Commissioner Basil Seggos in the announcement. "As our investigation continues to identify the sources and extent of the contamination, the interim measures announced today provide the community with a strong reassurance that we are working hard to protect their water supply and hold those responsible for this contamination accountable."

As part of the U.S. Environmental Protection Agency (EPA) Third Unregulated Contaminant Monitoring Rule (UCMR 3), Newburgh and other water suppliers of over 10,000 people were required to test for several potential contaminants, including PFOS.

From December 2013 to October 2014, the City collected four samples which had detections of PFOS ranging between 140 and 170 ppt and reported these results to EPA. Although all samples were below the EPA's provisional short-term health advisory of 200 ppt in place until recently, the State engaged the City and DOH conducted sampling of Newburgh's water system and confirmed the presence of PFOS in March 2016.

In May 2016, EPA set the new advisory level of 70 ppt.

“Together with the Governor and our partners at DEC, the Department of Health is committed to protecting Newburgh’s water supply as well as others across the state, so New Yorkers always have access to clean, high quality drinking water,” said Howard Zucker, Commissioner of Department of Health.

Funding for New Water Filtration System

The State announced today that it will fully fund the design and installation of a permanent water filtration system for Lake Washington to remove PFOS from the drinking water. The State has hired ARCADIS to design and construct the new Granulated Activated Carbon (GAC) filtration system, which is expected to be complete by October 2017 and the design will be approved by DOH. GAC is effective at removing PFOS and other perfluorinated chemicals (PFCs) from drinking water.

Secured Clean Water Supply from Catskill Aqueduct

As an interim step to ensure residents have access to clean drinking water, DEC and DOH assisted the City in transitioning on May 2nd to Brown’s Pond water supply, which is non-detect for PFOS, as an interim step to ensure residents have access to clean drinking water. On June 7th, the City began to draw water from the Catskill Aqueduct, and the State has committed to provide funding for the City to cover the costs of this water. Repeated testing has shown the water from the Catskill Aqueduct to be non-detect for PFOS. The State also plans to upgrade pipes, valves and other components of the City’s existing connections to Brown’s Pond and the Catskill Aqueduct to ensure that Newburgh can more efficiently draw from these backup sources now and in the future.

Investigation Continues

DEC's investigation to determine the full scope and extent of contamination has been underway since mid-March, when DEC began water sampling and site investigations of the Lake Washington watershed. Since March, the state has conducted 10 site visits and undertaken 6 sampling rounds (43 samples), including sampling of surface water, sediment, stormwater outfalls, drainage areas, ponds, and culverts to identify the extent and potential sources of the contamination in order to develop appropriate strategies to remediate the pollution. DEC shared sampling results with the City of Newburgh and has scheduled additional sampling for this week and the coming weeks. DEC is also investigating historic usage and storage of PFOS-containing firefighting foam in the areas around Lake Washington and its tributaries to identify potential sources.

Stewart Guard Base "strongly looked at" as source of Newburgh water contamination

June 21, 2016

Mid-Hudson [News.com](http://www.midhudsonnews.com)

NEWBURGH – The auditorium at Aquinas Hall at Mount Saint Mary College was filled with concerned Newburgh residents on Monday evening as they listened to city, state and federal officials from the departments of environmental protection, conservation and health, as well as from the non-profit group Riverkeeper, inform them of the discovery of Perfluorooctane Sulfonate, better known by its acronym "PFOS," in the city's water supply and what is being done about the problem.

State Assemblyman Frank Skartados termed the meeting productive.

"This is an environmental and public health crisis screaming out for help," said Assemblyman Frank Skartados, whose district includes Newburgh. "I'm very glad that we were able to bring all this talent together to address the issue in such a short period of time. Every level of government, from the state to the local to the federal, has come together to address this issue as quickly as possible. So, I'm very grateful for that."

“Right now, and since we’ve switched over to Brown’s Pond there is no PFOS in the water,” said Newburgh Mayor Judy Kennedy. “And because PFOS is a water-soluble substance, it washes through. Probably out of the system within a couple of days, since you’re washing millions of gallons of water through that system. So, right now the water is perfectly safe to drink from a PFOS perspective.”

“The City of Newburgh was proactive once they learned about a potential problem of a particularly serious contaminant PFOS that was found in Newburgh’s drinking water,” said Judith Enck, regional administrator of the U.S. Environmental Protection Agency. “So, the good news is that there is no PFOS in Newburgh’s drinking water today because they’ve been switched over to a different water source.”

In discussing the potential source of the contamination, which needs to be identified and remediated, Regional State Environmental Conservation Director Martin Brand said they are “strongly looking at the National Guard Base and the commercial side of Stewart Airport as potential sources for the PFOS contamination.” But Brand said they were also “looking at other areas in the tributaries to Lake Washington.”

Firefighting foam manufactured in the 1990s was found to contain PFOS in the early 2000s, and soon after, its manufacture was stopped. The foam of today is free of PFOS, although there is a concern about stored stockpiles of the old foam. Newburgh Fire Captain Paul Pullar said that foam is rarely used to put out fires, and typically only for larger hydrocarbon fires, such as those involving gasoline or aviation fuel. He gave the example that in his 16 years as a firefighter, he only saw foam used once.

The three-hour meeting, organized by the City of Newburgh, gave the audience an opportunity to also ask questions of the expert panel, in addition to making public comments, which ranged from detecting PFOS exposure levels through blood tests to better informing the public of the water situation, including giving notice to when public meetings occur.

When asked if she was concerned about her drinking water, Newburgh

resident Trish Dockstader said she is. "I've been a resident of the city for almost 70 years and I do drink the water. I always drank water right from the faucet and I do have health concerns."

In May, state officials detected high levels of PFOS in Washington Lake, the city's main water supply. Newburgh has since switched over to a back-up water source, which first included Brown's Pond, and when that ran low, the city tapped into the Catskill Aqueduct. Although only a temporary measure, state officials, in conjunction with their city and federal partners are working on finding a more permanent solution, including a filtration system, which the state has committed to fund. In the meantime, a water quality hotline, 1-800-801-8092, has been set up to answer questions from city residents.

DEC focuses on Stewart Air Base site in Newburgh water contamination probe

By Leonard Sparks

Posted Jun. 20, 2016 at 11:25 PM

Times Herald-Record

CITY OF NEWBURGH – A probe into the source of the chemical behind the closure of the City of Newburgh's primary water supply is turning toward accidental discharges of firefighting foam and its use to extinguish an airplane fire at Stewart Air National Guard Base in 1996, state officials said.

Department of Environmental Conservation officials say they are undertaking more testing at the base over the next week as they hunt for the source of the perfluorooctane sulfonate, or PFOS, contamination that forced Washington Lake's shutdown in May.

Their update came before over 100 people who attended a public forum on Newburgh's water crisis at Mount Saint Mary College on Monday.

Before residents peppered them with questions, federal, state and city officials gave an update on the investigation and state funding underwriting Newburgh's purchase of New York City water and installation by October 2017 of a filtration system effective at eliminating PFOS.

"Finding the source is essential, and we also have to find the entities who caused the pollution and make sure they pay the full cost of cleanup," said Judith Enck, administrator for the Environmental Protection Agency's Region 2.

Since March, DEC and state Department of Health investigators have been investigating the PFOS, which was first detected in Washington Lake in December 2013.

Samples taken at Recreation Pond, a retention basin at Stewart Air Base, showed significantly high levels. The pond discharges into Silver Stream, whose waters have long supplemented the lake.

Among the focuses is the airplane fire and instances from 1990 when hangar-based fire suppression systems were accidentally activated, discharging 2,000 gallons of foam, said George Heitzman, director of Remedial Bureau C for the DEC.

More samples will be taken at the Stewart airport and air base property over the coming days, said Martin Brand, director for DEC's Region 3.

"We understand there's contamination there, and we're refining our investigation," Brand said.

While the probe continues, residents have felt anger and anguish.

Colleen Battipaglia was among several people who wanted to know why city officials did not mail a notice to every resident about the problem.

"I find it absolutely unconscionable that the City of Newburgh has yet to send anything to my home letting me know about this crisis," she said.

Cindy Mack said she once lived at Silver Stream Park, in the Town of New Windsor, when her well and those of neighbors were contaminated in the 1990s with MTBE, a gasoline additive.

Her son was diagnosed with cancer at 18 and died at 19.

A neighbor's son was also diagnosed with cancer at 18 and is permanently disabled, said Mack, who now lives in the City of Newburgh.

"Now my grandson, who is 2 years old, is living in my house and drinking contaminated water," she said. "I can't express how I feel."

Schumer: Federal Government Should Investigate PFOA Contamination

By Web Staff

Monday, June 20, 2016 at 04:14 PM EDT

Time Warner News, Capital Region

Sen. Charles Schumer said he supports holding federal hearings to determine why the water problems in Rensselaer County went on for so long without being addressed.

"We have an obligation to these people. a hearing is a good thing to find out what happened. but we have to do a lot more than that. the water has to be cleaned up, people have to be tested and whatever remediation occurs has to be done," he said.

Schumer also said the Saint Gobain and Honeywell companies should act, since it's been determined they are responsible for the water contamination.

Video clip at: <http://www.twcnews.com/nys/capital-region/live-video/login.html>

Hoosick Falls residents speak out on water crisis

By Jenna Flanagan • 23 hours ago

New York Now

Last November, we took you to the small and rural village of Hoosick Falls, which was grappling with a report of contaminated water after elevated levels of the chemical perfluorooctanoic acid, or PFOA was detected in the water supply.

In the months that followed residents expressed confusion, frustration and even anger over the inconsistent communication between those affected and their state and local government.

Robert Allen, a father of 4 and music teacher in the Hoosick Falls School District is well known in town. But it was a YouTube video he made challenging a Cuomo Administration PSA that garnered far more attention.

Allen describes seeing the video as 'shocking' considering his New York community did not have clean water. So he made his own PSA.

"High I'm Rob Allen and I'm a proud New Yorker. Clean air, clean water uncontaminated foods, taking our kids to parks that are safe are things we used to take for granted. But here in Hoosick Falls where dumping of the cancer causing chemical PFOA has resulted in the contamination of our water supply we have realized that we have to fight for our own well being. We want to guarantee it for future generations."

"From our perspective in Hoosick Falls where we've been shouting for months and months and months the people where the ones to say hay there's a problem here, the people identified it, we've been advocating all this time and the government had just been dragging their feet for so long."

The frustration had been simmering for months but when it was revealed through emails in Politico expose that officials from the Governor to the Village Mayor knew of the dangerously high chemical contamination residents were consuming that frustration boiled into anger.

"First we were irritated about that, finding out that the Department of Health fought with the EPA to tell us to stop drinking the water. So we were already kind of enflamed about that and then the envelopes came."

Those envelopes, from the state Department of Health, addressed individually to every man woman and child contained the PFOA parts per trillion found to be in each person's blood. Several residents, including most children tested well above the EPA advised baseline of 70 parts per-trillion.

That coupled with a sense of inaction from government which declined to hold hearings on the matter, was too much for Hackett.

"We decided, if they're not going to listen to us, they're gonna see us."

Hackett and a friend Michelle Baker launched the twitter feed PFOA-Project-NY-1, featuring images of Hoosick Falls residents holding up cards with their DOH tested blood contamination levels.

“I talked about it with my family, and my daughter and son-in-law agreed we’ll do these pictures. How can you not look at a 6-year-old with 142 PFOA contamination levels? If you won’t hear us, you’re going to see us.”

Hackett and a group of locals from the village, town and surrounding area took those very images with them to the capitol along with Assemblymen Steve McLaughlin to push the legislature to hold public hearings on the government’s handling of the PFOA contamination of Hoosick Falls water.

“A hearing is to hear from people and if in fact there was wrong doing then I ask you what is wrong with saying there was wrong doing? Why do we hold hearings ever on anything? Why pass bills? Most of the bills we pass are to hold people responsible for something that either happened and we’re addressing it or we don’t want to happen. So I don’t understand why we have this mantra in this building of, well we can hold hearings but god forbid we hold anybody responsible. If that’s what comes out of the hearings, then so be it.”

Immediately after their press conference, the Hoosick Falls residents got an audience with one of Governor Coumo’s aids, which was a start for Robert Allen, even though it didn’t result in any official promise of a hearing, continued bio-monitoring or finding an alternative water source. It did give them a sense of what was being done and why.

“This kind of testing is very specific and tricky and there are very few places in the country that do this, but they are working on their own approach to testing so that they can do this in a more faster way.”

For Allen, what he’d really like his government to clarify is what those blood test levels mean, so that as bio monitoring continues families don’t have to try and comprehend form letters from the Department of Health.

“We opened mine first, cause how bad would it be? It was in the 50’s which I didn’t expect. Then we opened my wife’s which was a great great low number and I was relieved to see that. And then I said ‘alright, let’s to go my youngest’ that’s when she was tested, she was under two and how high could it be? 112. It was over twice my score. Which floored me because she’s only been alive for less than two years at the time she was tested. That was hard, I’ll never forget that moment, I didn’t have much to say after that. And then we went through each kid and found out that the younger the child, the higher their number was. So all of my kids have numbers well above mine and that was scary.”

No one, Allen says has been able to clarify exactly what those PFOA blood levels mean.

WaterNews

Drinking Water Warning Issued for Nonstick Chemical: Flint lead scandal a factor in stirring action for other contaminants

by Brett Walton

June 20, 2016

Circle of Blue – Water News

/in Groundwater, Pollution, United States, Water News, Water Quality /

Teflon — “Nothing messes with it,” reads the tagline on the latest ad campaign for the famed nonstick cookware. A fried egg, sunny side up, vaults out of the pan, leaving no scraps behind.

Teflon and related brands Gore-Tex, Scotchgard, and Stainmaster — all prized

for their water-repelling, stain-protecting, and mess-preventing attributes — seem to contain magical properties. In fact, the magic comes from long chains of carbon and fluorine atoms called perfluorinated compounds that are chemically stable and remarkably repellent.

Yet the very same chemical formula that made perfluorinated compounds useful also turned them into an enduring and persistent hazard to public health and the environment. The life cycle of perfluorinated compounds, the most well-known being PFOA and PFOS, is a familiar tale of mid-20th century chemical innovation and industrial profitability that evolved by the end of the century into a costly public cleanup problem and health risk.

Last month, seven years after it issued the first health guidelines for PFOA/PFOS in drinking water, the U.S. Environmental Protection Agency lowered the recommended level in drinking water to 0.07 parts per billion combined. The agency's recommendation, which is voluntary, is intended to prevent kidney cancer, immune system damage, and other health problems linked to the compounds. Water utilities from New England to the Southeast reacted quickly and announced measures to add equipment and take other steps to remove PFOA/PFOS in water supplied to homes and businesses.

A Mess From An Economic Success

DuPont, 3M, and other industrial giants begin producing PFOA/PFOS in the years before World War II.

After decades of use, however, problems emerged. In the late 1990s, cows drinking from streams near a landfill at DuPont's Washington Works production facility in Parkersburg, West Virginia, fell sick and died. Kidney cancers, high cholesterol levels, and thyroid disease started appearing in town residents. In time, communities near production facilities in Alabama, New York, and Vermont found perfluorinated chemicals in their drinking water. The wonders of post-war consumerism were suddenly less wondrous. The magic compounds themselves were starting to cause a mess.

The EPA began investigating the chemicals around the time the cows died. In 2002, the agency reached voluntary agreements with companies to phase out production of PFOA and PFOS, two perfluorinated compounds of the greatest health concern.

Because they were often discarded in landfills, the compounds seeped into the ground, eventually contaminating drinking water wells. In light of the new guidance issued last month, water utilities responded quickly. They changed water sources, invested in treatment equipment, and notified customers about potential health consequences. After detecting PFOA/PFOS levels above the new recommended limit, a utility in northern Alabama warned 100,000 residents in early June not to drink the tap water at all until it could install a carbon-filtration system, due to be completed in September.

Though some environmental health groups argue that the EPA should have acted sooner and that the limits should be even lower, many water policy analysts praised the EPA for updating the guidance and providing utilities with the information needed to assess options. Some see in the rapid response by utilities the influence of the drinking water debacle in Flint, Michigan where warnings about dangerous lead levels in water went unheeded.

“Because of Flint everyone and their brother is interested in drinking water in ways that were not evident six months ago,” Jim Taft, executive director of the Association of State Drinking Water Administrators, a regulators group, told Circle of Blue. “Everything gets visibility and attention now.”

EPA officials did not respond to a request for an interview.

An Advisory, Not a Regulation

The EPA did not publish a more rigorous and enforceable drinking water “standard” for PFOA and PFOS, the two compounds that have prompted lawsuits against chemical manufacturers and heightened concerns about municipal water supplies in Hoosick Falls, New York; North Bennington,

Vermont; Parkersburg, West Virginia; and dozens of other communities. Regulated water standards — called an MCL in the policy world — must go through an extensive scientific and economic analysis, and a public hearing process that can take at least five years.

“The EPA is caught in a jam,” Alan Roberson, director of policy for Corona Environmental Consulting, told Circle of Blue. “It takes a long time to set standards but the agency is being asked to do something to respond, to show that it can be nimble.”

Instead, the agency strengthened a health advisory that it had issued in provisional form in 2009. Health advisories are meant to identify contamination levels at which a health risk could occur if ingested over days or a lifetime. The agency has issued roughly 180 water-related health advisories since 1987, including one last year for two cyanotoxins found in algae blooms.

Unlike standards, health advisories do not take into account the cost of treatment or the availability of treatment technology. Whereas standards are enforced by the EPA with fines and deadlines, health advisories have no such regulatory stick. Utilities can choose to act or to ignore the warning.

Mike Keegan, a policy analyst for the National Rural Water Association, told Circle of Blue that the health advisory is a “positive step.”

“I think it is helpful to have a health advisory as information to assist the public discussion,” Keegan said.

One Pennsylvania congressman called for a congressional investigation over PFOA/PFOS contamination at more than 660 military bases that used firefighting foams with the compounds. Many utilities, meanwhile, are following the precautionary principle. Don Sims, general manager of the West Morgan East Lawrence Water and Sewer Authority, in northern Alabama, told his customers on June 2 not to drink the tap water.

"I would rather be over-cautious than under-cautious," Sims told [AL.com](#). "I'm not a doctor, I'm not a chemist, but when [federal officials] tell one class of people the water is not safe, I don't want to be the one to say 'you drink it and you don't.' So I said nobody drink it." Six days later, West Morgan East Lawrence began buying water from a neighboring utility to blend with its own supply. The purer water helped. The water authority now says that PFOA/PFOS levels are below the EPA limit.

EPA Data Provides Partial Contamination Picture

PFOA/PFOS is not a new warning signal on the EPA radar. The agency has investigated its potency and prevalence for nearly two decades. As a result of an initial investigation in 2002, both chemicals have been largely eliminated from U.S. production lines. 3M, the sole manufacturer of PFOS in the United States, phased out production between 2000 and 2002. Major manufacturers of PFOA agreed to stop producing the chemical by 2015, though the EPA says that there are still "limited" ongoing uses.

How widespread is the contamination? EPA data provide a partial answer. The two compounds are on a list of unregulated contaminants that the EPA monitors. Every five years or so, the agency requires certain utilities to test drinking water supplies for several dozen pollutants. The results are used in setting regulatory standards. The most recent monitoring period, which ran from January 2013 to December 2015, assessed 28 chemical and eight microbial contaminants.

Some 4,864 utilities, most of which serve more than 10,000 people, tested their drinking water for PFOA and PFOS. Of those, less than one percent, or 46 systems, had PFOS above 0.04 parts per billion (ppb). Only 13 systems had PFOA concentrations above 0.02 ppb. The new health standard is 0.07 ppb for both chemicals combined. The results also list how many systems were above 0.07 ppb for each chemical: 94 for PFOS and 108 for PFOA. Four other perfluorinated compounds appeared in dozens of water systems.

It is helpful information, but the data do not provide the entire picture,

according to Roberson. Most of the utilities in the monitoring program use rivers or lakes as a water supply, and contamination from perfluorinated chemicals generally happens to groundwater, he said. Smaller systems are more likely to use groundwater, and they were not tested.

“You can’t do a simple extrapolation from the database to estimate national level data,” Roberson explained.

In the absence of regulatory mandates, it is the local communities that must decide how to proceed, says Keegan, who recommends full transparency from the utilities about any contamination. “Do you stop using the water? Do you treat the water? Do you move to a different source? These are all things that you have to consider locally.”

State DEP investigating water contamination in Doylestown area

By Kyle Bagenstose and Christopher Ullery, staff writers

Posted: Tuesday, June 21, 2016 12:30 pm | Updated: 4:00 pm, Tue Jun 21, 2016.

The Intelligencer

An investigation has been launched into contaminated drinking water in Doylestown Township, Buckingham and Plumstead, the Pennsylvania Department of Environmental Protection announced Tuesday.

The agency said it will sample private and community wells, some of which supply nursing homes and day cares, within 1 mile of Doylestown Township Municipal Authority’s Cross Keys well for perfluorinated compounds, the statement said.

The well is behind Cross Keys Shopping Center in Plumstead.

Unregulated chemicals perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) were found in wells near former military bases in

Warminster, Warrington and Horsham. To date, 16 public water wells and approximately 140 private wells have been closed because of contamination, along with a well on the active Horsham Air Guard Station.

However, PFOA was also found in the Cross Keys well during a nationwide testing program by the Environmental Protection Agency in 2014. In May of this year, the EPA released a recommended limit for PFOA in drinking water at 0.07 parts per billion — three times lower than the 0.21 ppb that was found in 2014.

The authority closed the well May 19 at the request of the state DEP.

On June 7, Richard John, the authority's executive director, told this news agency the authority found one private well that tested above the limit for chemicals and alerted the Pennsylvania DEP, which then advised the owner to use bottled water.

Now, the DEP says it is conducting its own sampling to determine if there are other affected private wells.

“At this time, the extent and source of the contamination is not yet known,” Cosmo Servidio, southeast regional director for the DEP, said in the agency's statement Tuesday. “DEP is working expediently to investigate private wells in the area, remove them from service and determine a long-term solution.

The statement also said the DEP will provide bottled water to any residence where it finds contamination above the 0.07 ppb level, paid for by the agency's Hazardous Sites Cleanup fund.

The expanded water investigation will also include efforts to identify the source of the contamination, the agency said.

It is highly unlikely the site was contaminated by firefighting foams from the military bases to the south, which are more than 8 miles away. PFOS is also the primary contaminant found near the bases, but was not detected in the Cross Keys well.

A related chemical, PFNA, was found in the Cross Keys well at 0.026 ppb in 2014. The EPA has not issued any recommended limits for PFNA.

The source of the Cross Keys well contamination is still unknown, John said earlier this month.

"Where it came from, I have no idea," he said. Township officials have said the current water supply for township residents is safe.

"I just want to make it clear that no one in our township that uses our water, Doylestown Township Municipal Authority water, is affected," Doylestown Township Supervisor Richard Colello said earlier this month.

The well served approximately 200 customers in Plumstead, Buckingham and the Cross Keys section of Doylestown Township, but John has previously said that many of the customers are commercial and most did not seem to notice the well's shutdown.

On May 23, John said the township began buying water from an existing connection in Doylestown at approximately 40,000 gallons per day at \$1.10 per thousand gallons each day.

"It was already supplying water (about 20,000 gallons per day) now. It's just more flow," John said early this month.

While research on the health effects of the chemicals is incomplete, studies have linked the chemicals to a variety of health effects, including cancers.

John said any concerned residents with private wells should contact the DEP's Southeast Regional Office in Norristown, which can be reached at 484-250-5900.

Merrimack Public Water Customers Demand Accountability At Commissioners' Meeting

By Emily Corwin • 21 hours ago

New Hampshire Public Radio

Residents concerned about PFOA contamination in Merrimack's public water supplies demanded more accountability from commissioners at a meeting held on Monday.

Unlike many other towns in New Hampshire, Merrimack's public water is overseen by an independent board of commissioners and is not coordinated with town government.

"What are we doing about blood testing? What are we doing about filtration systems?" resident Jim Bollengier asked the commissioners. "Those are the kinds of things you need to address to the public about where we're going."

Residents near the Saint-Gobain Plastics Plant with private wells containing over a 70 parts-per-trillion concentration of PFOA have gotten free bottled water, and will be eligible for free blood testing from the state. The public water in Merrimack has been below that concentration since two wells were shut off – meaning residents on public water don't get any of those free services.

While the remaining wells have tested as high as 45 parts per trillion in the past, the most recent water test shows PFOA concentrations barely above background levels: between 10 and 13 parts per trillion.

PFOA levels in Merrimack's public wells regularly vary as much as 20 parts per trillion between tests, which the state conducts on a weekly basis.